Integrales inmediatas

Tipo	Casos particulares	Caso general
Pot.	$\int x^p\,dx = \frac{x^{p+1}}{p+1} + C, \quad p \neq -1$	$\int f'(x)(f(x))^p dx = \frac{(f(x))^{p+1}}{p+1} + C, \quad p \neq -1$
Exp.	$\int a^x dx = \frac{a^x}{\ln a} + C, \quad a > 0,\ a \neq 1$ $\int e^x dx = e^x + C$	$\int f'(x) a^{f(x)} dx = \frac{a^{f(x)}}{\ln a} + C, \quad a > 0,\ a \neq 1$ $\int f'(x) e^{f(x)} dx = e^{f(x)} + C$
Log.	$\int \frac{dx}{x} = \ln\|x\| + C$ $\int \frac{dx}{a^2 - x^2} = \frac{1}{2a} \ln \left\| \frac{a+x}{a-x} \right\| + C$ $\int \frac{dx}{\sqrt{x^2 \pm a^2}} = \ln \left\| x + \sqrt{x^2 \pm a^2} \right\| + C$	$\int \frac{f'(x)}{f(x)}\,dx = \ln\|f(x)\| + C$
Trig.	$\int \cos x dx = \operatorname{sen} x + C$ $\int \operatorname{sen} x dx = -\cos x + C$ $\int (1 + \operatorname{tg}^2 x)\,dx = \int \frac{dx}{\cos^2 x} = \operatorname{tg} x + C$ $\int (1 + \operatorname{cotg}^2 x)\,dx = \int \frac{dx}{\operatorname{sen}^2 x} = -\operatorname{cotg} x + C$ $\int \sec x \operatorname{tg} x\,dx = \int \frac{\operatorname{sen} x}{\cos^2 x}\,dx = \sec x + C$ $\int \operatorname{cosec} x \operatorname{cotg} x\,dx = \int \frac{\cos x}{\operatorname{sen}^2 x}\,dx = -\operatorname{cosec} x + C$ $\int \operatorname{tg} x\,dx = -\ln\|\cos x\| + C$ $\int \operatorname{cotg} x\,dx = \ln\|\operatorname{sen} x\| + C$	$\int f'(x) \cos f(x) dx = \operatorname{sen} f(x) + C$ $\int f'(x) \operatorname{sen} f(x) dx = -\cos f(x) + C$ $\int \frac{f'(x)}{\cos^2 f(x)}\,dx = \operatorname{tg} f(x) + C$ $\int \frac{f'(x)}{\operatorname{sen}^2 f(x)}\,dx = -\operatorname{cotg} f(x) + C$ $\int \frac{f'(x) \operatorname{sen} f(x)}{\cos^2 f(x)}\,dx = \sec f(x) + C$ $\int \frac{f'(x) \cos f(x)}{\operatorname{sen}^2 f(x)}\,dx = -\operatorname{cosec} f(x) + C$
Trig. Inversas	$\int \frac{dx}{\sqrt{1 - x^2}} = \operatorname{arcsen} x + C$ $\int \frac{dx}{1 + x^2} = \operatorname{arctg} x + C$	$\int \frac{f'(x)}{\sqrt{1 - f^2(x)}}\,dx = \operatorname{arcsen} f(x) + C$ $\int \frac{f'(x)}{1 + f^2(x)}\,dx = \operatorname{arctg} f(x) + C$
Hiperb.	$\int \operatorname{senh} x dx = \cosh x + C$ $\int \cosh x dx = \operatorname{senh} x + C$ $\int \frac{dx}{\cosh^2 x} = \operatorname{tgh} x + C$	

Funciones hiperbólicas: $\begin{cases} \operatorname{senh} x = \frac{e^x - e^{-x}}{2} \\ \cosh x = \frac{e^x + e^{-x}}{2} \\ \operatorname{tgh} x = \frac{e^x - e^{-x}}{e^x + e^{-x}} \end{cases}$